#### **PCT**

(21) International Application Number:

## WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



#### INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> :		(11) International Publication Number:	WO 00/47856
E05F 5/02	A1	(43) International Publication Date:	17 August 2000 (17.08.00)

PCT/US99/02977

- (22) International Filing Date: 11 February 1999 (11,02,99)

  (71)(72) Applicants and Inventors: MUNGO Alma L. (US/US):
- (71)(72) Applicants and Inventors: MUNGO, Alma, L. [US/US]; 1119 East 88th Street, Brooklyn, NY 11236-4761 (US). MUNGO, W., T. [US/US]; 1119 East 88th Street, Brooklyn, NY 11236-4761 (US).
- (74) Agent: KROLL, Michael, I.; 171 Stillwell Lane, Syosset, NY 11791 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

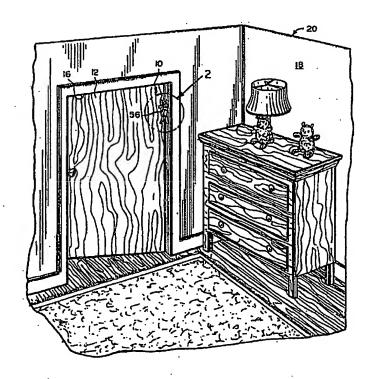
Published

With international search report.

(54) Title: HOLDING DEVICE FOR A DOOR

#### (57) Abstract

A holding device (10) for a door (12) on hinges (14) in a doorway (16) of a room (18) in a building (20) comprising a plate (22). A facility (24) is for mounting the plate (22) over one of the hinges (14) of the door (12). The door (12) will be kept ajar, to allow pets, small children and crawling babies to enter and exit through the doorway (16) in a safe manner. The holding device (10) will also keep a basement door ajar to allow cats freedom to use their litter boxes when needed.



## FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

()

							· ·
AL	Albania	ES	Spain	Ŀs	Lesotho	SI	Slovenia
AM	Armenia	PI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Schegal
ΑU	Australia	GA	Gabon	LV	Larvia	SZ	Swaziland
AZ	Azerbaijan	GB	"United Kingdom .	MC	Моласо	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	T3	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	Burkina Paso	GR	Greece		Republic of Mecedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IB	Ireland	. MN	Mongolia	UA ·	Ukraine
BR	Brazil <sub>.</sub>	IL	Israel	MR	Mauritania	UG	Uganda
BY.	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	. IT	Italý ·	MX	Mexico	UZ	· Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzatan	NO	Norway	zw	Zimbabwe
Œ	- Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand	2	ZALIIOUD WO
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		•
CU	Cuba	KZ	Kazakstan	RO	Romania	•	
cz	Czech Republic ·	LC	Saint Lucia	RU	Russian Federation		
DE	Germany .	LI	Liechtenstein	SD .	Sudan		•
DK	Denmark	LK	Sri Lanka	SE	Sweden		
RE	Estonia	LR	Liberia	SG	Singapore		

1

#### HOLDING DEVICE FOR A DOOR

#### **Description**

#### Technical Field

The instant invention relates generally to doorstops and more specifically it relates to a holding device for a door. The holding device is placed over a door hinge to keep the door opened slightly, to allow pets, small children and crawling babies to enter and exit through the doorway without any problems. Also the door will be ajar slightly to allow fresh air in if desired or for any other reason. The holding device does not make the door stationary. The door is able to be pushed back and forth, but not able to close completely without removing the device first.

#### Disclosure of the Invention

A primary object of the present invention is to provide a holding device for a door that is placed over a door hinge to keep the door ajar in a slightly opened position, so as to allow pets, small children and crawling babies to enter and exit the doorway in a safe manner. An additional object is to provide a holding device for a door that has an optional decorative ornament attached to cloth covered pasteboard material thereto that will blend in with any occasion or carpet color, so as to enhance the appearance of the room within a building. The holding device that is made out of flexible plastic, polyethylene or similar material would not need to be covered with any other material or enhanced with a decorative ornament. To add these would be optional, because the color and molding of the device made from any of these materials would be attractive enough without the optional add on decorative ornament.

A further object is to provide a holding device for a door that is simple and easy to use.

A still further object is to provide a holding device for a door that is economical in cost to manufacture.

Further objects of the invention will appear as the description proceeds.

#### **Brief Description of the Drawing Figures**

Various other objects, features and attendant advantages of the present invention will become more fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views.

FIGURE 1 is a perspective view of a portion of a room in a building, showing a first embodiment of the instant invention installed on a hinge of a right handed door.

FIGURE 2 is an enlarged exploded perspective view of the first embodiment per se as indicated by arrow 2 in Figure 1.

FIGURE 3 is a further enlarged perspective view of the first embodiment with the decorative ornament removed.

FIGURE 4 is a perspective view of a second embodiment of the instant invention that can be installed on a hinge of a left handed door.

FIGURE 5 is a still further enlarged perspective view of the first embodiment taken in the direction of arrow 5 in Figure 3, with parts broken away and in phantom, showing how the first embodiment is installed on the hinge.

The reference numbers utilized in the drawing figures are defined as follows.

- 10 holding device
- 12 door
- 14 hinge of 12
- 16 doorway in 18

18	room of 20
20	building
22	plate of 10
24	mounting facility of 10
26	slightly flexible flat rectangular member for 22
27	rounded corner of 22
28	plastic material for 22
30	polyethylene material for 22
32	pasteboard material for 22
34	non-bulky colorful cloth-like material on 22
36	longitudinal slot in 22 for 24
38	one end of 22
-	

**40** . leaf of **14** 

- 42 barrel of 14
- 44 wide segment of 22
- 46 narrow segment of 22
- 48 strap on 22
- 50 first end of 48
- 52 snap fastener between 54 and 22
- second end of 48
- optional decorative ornament of 10
- 58 attaching structure of 10
- 60 hook fabric fastener tab of 58
- 62 loop fabric fastener tab of 58

#### Detailed Description of the Preferred Embodiment

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, Figures 1 through 5 illustrate a holding device 10 for a door 12 on hinges 14 in a doorway 16 of a room 18 in a building 20 comprising a plate 22. A facility 24 is for mounting the plate 22 over one of the hinges 14 of the door 12. The door 12 will be kept ajar, to allow pets, small children and crawling babies to enter and exit through the doorway 16 in a safe manner.

The plate 22 is a slightly flexible flat rectangular member 26. Plate 22 includes four rounded corners 27 to prevent anyone, especially small children from getting hurt. The plate 22 can be fabricated out of a colorful plastic material 28, out of a colorful polyethylene material 30 or similar material or out of a pasteboard material 32. Also, the plate 22 can be covered with an optional non-bulky colorful cloth-like material 34, as shown in phantom in Figure 5. If the right material is used and molded correctly, then only the device 10 made of pasteboard material 32 would have to be covered with the non-bulky colorful cloth-like material 34. The ones made out of plastic material 28 or polyethylene material 30 should be made of different color choices.

The mounting facility 24 is a longitudinal slot 36 extending inwardly from one end 38 of the plate 22. The plate 22 can slip over the door hinge 14 between one leaf 40 and the barrels 42 of the door hinge 14, as best seen in Figure 5. The longitudinal slot 36 is offset to one side thereof, so as to separate the plate 22 into a wide segment 44 and a narrow segment 46. The wide segment 44 will bear against the side of the doorway 16, to keep the door 12 ajar.

A strap 48 is affixed at a first end 50 to the plate 22. The strap 48 will extend across the longitudinal slot 36 adjacent the one end 38 of the plate 22. A snap fastener 52 or similar fastener is between a second end 54 of the strap 48 and the plate 22. The strap 48 will be retained beneath the leaf 40 of the door hinge 14, to prevent children from easily removing the plate 22, if placed on a lower hinge 14. If the plate 22 is made of colorful plastic material 28, colorful polyethylene material 30 or similar material, the strap 48 should then be welded or mated onto the material and fastened with the appropriate fastener.

The holding device 10 can further contain an optional decorative ornament 56, as shown in Figures 1 and 2. A structure 58 is for attaching the optional decorative ornament 56 to the plate 22, so as to enhance the appearance thereof. The optional decorative ornament 56 would be better attached to the edge thickness or centered at the top on the narrow segment 46 for doors 12 opened with a left hand in pulling the door 12 inside the room 18. When opened from a hall within an apartment or house with a right hand, the optional decorative ornament 56 could be placed on the narrow segment 46.

The removable attaching structure 58 is a pair of hook and loop fabric fastener tabs 60, 62. One tab 60 is affixed to the plate 22, while the other tab 62 is affixed to the optional decorative ornament 56. The tabs 60, 62 are pressed and mated together. The optional decorative ornament 56 will be attached to the plate 22. The optional decorative ornament 56 can also be permanently sewn onto the plate 22.

Typical sizes of the holding device 10, include but are not limited to the following.

- A) Length of plate 12 is six inches.
- B) Width of plate 12 is two and a quarter inches.
- C) Thickness of plate 12 is between one eighth to one quarter of an inch.
- D) Length of longitudinal slot is four and one half inches.
- E) Width of longitudinal slot is one eighth of an inch.
- F) Width of wide segment 44 is one and three eights inches.
- G) Width of narrow segment 46 is three quarters of an inch.
- (H) Length of strap 48 is two inches.
- I) Width of strap 48 is five eighths of an inch.

#### HOLDING DEVICE FOR A DOOR

#### **Claims**

- 1. A holding device for a door on hinges in a doorway of a room in a building comprising:
  - a) a plate; and
  - b) means for mounting said plate over one of the hinges of the door, so that the door will be kept ajar, wherein said mounting means is a longitudinal slot extending inwardly from one end of said plate, so that said plate can slip over the door hinge between one leaf and the barrels of the door hinge, said holding device further including:
    - i) a strap affixed at a first end to said plate, so that said strap will extend across said longitudinal slot adjacent the one end of said plate; and
    - ii) a snap fastener between a second end of said strap and said plate, so that said strap will be retained beneath the leaf of the door hinge, to prevent said plate from being accidentally removed, if placed on a lower hinge.

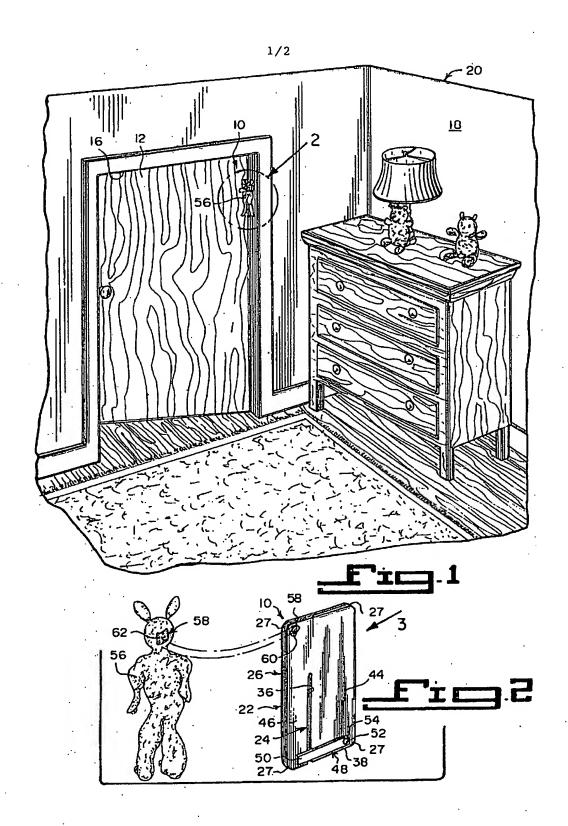
- 2. A holding device for a door as recited in Claim 1, wherein said plate is a slightly flexible flat rectangular member.
- 3. A holding device for a door as recited in Claim 1, wherein said plate is fabricated out of a colorful plastic material.
- 4. A holding device for a door as recited in Claim 1, wherein said plate is fabricated out of a colorful polyethylene material.
- 5. A holding device for a door as recited in Claim 1, wherein said plate is fabricated out of a pasteboard material.
- 6. A holding device for a door as recited in Claim 1, wherein said plate is covered with a non-bulky colorful cloth-like material, especially to cover a pasteboard material.
- 7. A holding device for a door as recited in Claim 1, wherein said longitudinal slot is offset to one side thereof, so as to separate said plate into a wide segment and a narrow segment, so that said wide segment will bear against the side of the doorway to keep the door ajar.

- 8. A holding device for a door as recited in Claim 1, further including:
- a) an optional decorative ornament; and
- b) means for attaching said optional decorative ornament to said plate, so as to enhance the appearance thereof.
- 9. A holding device for a door as recited in Claim 8, wherein said attaching means is a pair of hook and loop fabric fastener tabs, in which one said tab is affixed to said plate, while other said tab is affixed to said optional decorative ornament, so that when said tabs are pressed and mated together, said optional decorative ornament will be attached to said plate.
- 10. A holding device for a door as recited in Claim 1, wherein said plate includes four rounded corners to prevent anyone, especially small children from getting hurt.
- 11. A holding device for a door as recited in Claim 10, wherein said plate is fabricated out of a colorful plastic material.
- 12. A holding device for a door as recited in Claim 10, wherein said plate is fabricated out of a colorful polyethylene material.

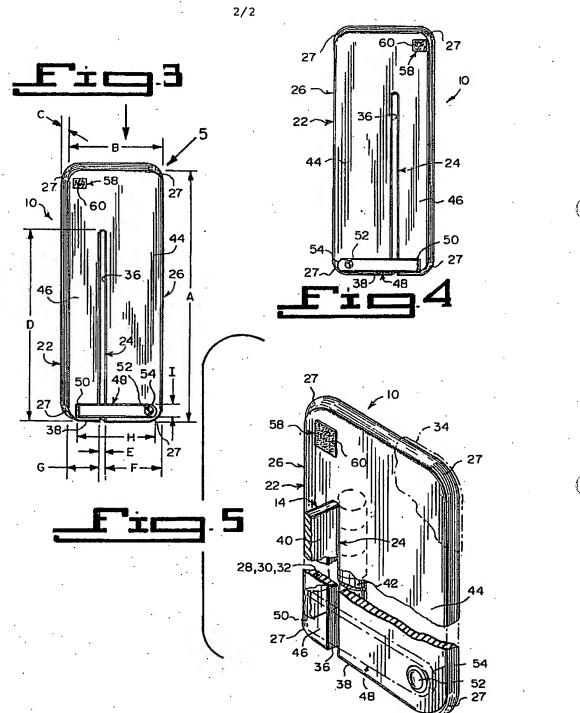
WO 00/47856 PCT/US99/02977

12 '

- 13. A holding device for a door as recited in Claim 10, wherein said plate is fabricated out of a pasteboard material.
- 14. A holding device for a door as recited in Claim 10, wherein said plate is covered with a non-bulky colorful cloth-like material, especially to cover a pasteboard material.
- 15. A holding device for a door as recited in Claim 10, wherein said longitudinal slot is offset to one side thereof, so as to separate said plate into a wide segment and a narrow segment, so that said wide segment will bear against the side of the doorway to keep the door ajar.



PCT/US99/02977



` , ,

(

## INTERNATIONAL SEARCH REPORT

International application No. PCT/US99/02977

	SSIFICATION OF SUBJECT MATTER E05F 5/02				
US CL :	:16/82,319,374,375,349,86R; 292/288,289, DIG. 17 o International Patent Classification (IPC) or to both t	national classification and IPC			
B. FIEL	DS SEARCHED				
	ocumentation searched (classification system followed	by classification symbols)	•		
ับ.\$. :	16/82,319,374,375,349,86R; 292/288,289, DIG. 17				
Documentat NONE	tion searched other than minimum documentation to the	extent that such documents are included	in the fields searched		
Electronic d NONE	lata base consulted during the international search (na	me of data base and, where practicable	, search terms used)		
C. DOC	UMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.		
A	US 0,314,105 A (CARNES) 17 March	1 1885 (17.03.85)	NONE		
Α	US 3,786,533 A (O'DONNELL) 22 .	January 1974 (22.01.74)			
<b>A</b> .	US 3,918,121 A (WILLIAMS) 11 No	ovember 1975 (11.11.75)			
A US 5,027,471 A (BARNES) 02 July 1991 (02.07.91)  A US 5,098,142 A (FONTENOT) 26 November 1991 (26.11.91)					
					A
		•			
X Furth	her documents are listed in the continuation of Box C	. See patent family annex.	<u> </u>		
Special extenderies of cited documents:     "I" Inter document published after the international filing date or priority					
"A" document defining the general state of the art which is not considered the principle or theory underlying the invention					
to be of particular relevance  "E" certier document published on or after the international filing date  "X" document of particular relevance; the claimed invention can considered novel or cannot be considered to invent					
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special research (or processing the processing the processing the processing the processing the processing that the publication date of another citation or other special research (or processing the processing that the processing that the processing that the processing the processing that the processing					
*O* do	considered to involve an inventive stop when the document				
"P" document published prior to the international filing date but later than "A" document member of the same patent family the priority date claimed					
Date of the	actual completion of the international search	Date of mailing of the international se			
Name and	mailing address of the ISA/US oner of Patents and Trademarks	Authorized officer Deans	Gorluga		
Washington, D.C. 20231  Telephone No. (703) 308-0676					

Form PCT/ISA/210 (second sheet)(July 1992)\*

## INTERNATIONAL SEARCH REPORT

International application No. PCT/US99/02977

	PCT/US99/0297	/
C (Continua	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
-ategory	Chanton of document, with indication, where appropriate, of the felevant passages	Kelevant to Claim 110
Α	US 5,450,652 A (WEBB) 19 September 1995 (19,09.95)	
Α	US 5,511,837 A (DEMPSEY ET AL) 30 April 1996 (30.04.96)	
. !		·
!		
	·	
		. ,
		·
	·	•
~··		
		<u> </u>

# This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record.

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
LINES OR MARKS ON ORIGINAL DOCUMENT
REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
OTHER.

# IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.